

**APR/FY06**

**MTA CAMP EDWARDS**  
**Massachusetts**

**Army Defense Environmental  
Restoration Program  
Installation Action Plan**

Final 2 June 2006

---

Table of Contents

*Table of Contents*..... 1

*Statement of Purpose*..... 2

*Acronyms* ..... 3

  

*Installation Information* ..... 5

*Cleanup Program Summary*..... 6

  

*Military Munitions Response Program*..... 8

*Summary*..... 9

*Contamination Assessment*..... 10

*MMRP Active Sites*..... 12

MMR-001-R-01 Mock Village ..... 13

MMR-002-R-01 Old G Range..... 14

MMR-003-R-01 Old Grenade Courts ..... 16

MMR-004-R-01 Old K Range..... 17

MMR-005-R-01 Otis Target Butts..... 19

MMR-006-R-01 Small Arms Range..... 20

MMR-007-R-01 Stables Area ..... 21

  

*MMRP Schedule* ..... 22

*MMRP Costs* ..... 23

  

*Community Involvement* ..... 24

---

## Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Military Munitions Response Program (MMRP). The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

The MMRP is specifically focused at contamination resulting from activities on ranges that have since been closed, transferred or transferring, and is funded by the centrally-managed Environmental Restoration, Army (ER,A) budget account.

In an effort to coordinate planning information between the MMRP manager, US Army Environmental Center (USAEC), and National Guard Bureau (NGB), an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this Installation Action Plan:

Engineering & Environment Inc. for USAEC  
MANG Environmental and Readiness Center  
USAEC

## Acronyms & Abbreviations

<b>AEDB-R</b>	Army Environmental Database-Restoration
<b>AFCEE</b>	Air Force Center for Environmental Excellence
<b>ASR</b>	Archive Search Report
<b>BOMARC</b>	Boeing Michigan Aeronautical Research Center
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation and Liability Act of 1980
<b>CTC</b>	Cost to Complete
<b>DA</b>	Department of the Army
<b>DD</b>	Decision Document
<b>DERP</b>	Defense Environmental Restoration Program
<b>DoD</b>	Department of Defense
<b>E&amp;RC</b>	Environmental and Readiness Center
<b>EMC</b>	Environmental Management Commission
<b>EOD</b>	Explosive Ordnance Disposal
<b>ER,A</b>	Environmental Restoration, Army
<b>FS</b>	Feasibility Study
<b>FY</b>	Fiscal Year
<b>HE</b>	High Explosives
<b>HRR</b>	Historical Records Review
<b>IAP</b>	Installation Action Plan
<b>IRP</b>	Installation Restoration Program
<b>LTM</b>	Long-Term Management
<b>MAARNG</b>	Massachusetts Army National Guard
<b>MAANG</b>	Massachusetts Air National Guard
<b>MassDEP</b>	Massachusetts Department of Environmental Protection
<b>MANG</b>	Massachusetts National Guard
<b>MC3</b>	Military Civilian Community Council
<b>MEC</b>	Munitions and Explosive Constituents
<b>mm</b>	millimeter
<b>MMR</b>	Massachusetts Military Reservation
<b>MMRP</b>	Military Munitions Response Program
<b>MTA</b>	Military Training Area
<b>NGB</b>	National Guard Bureau
<b>NPL</b>	National Priorities List
<b>OE</b>	Ordnance and Explosive
<b>PA</b>	Preliminary Assessment
<b>RA(C)</b>	Remedial Action (Construction)
<b>RAB</b>	Restoration Advisory Board
<b>RA(O)</b>	Remedial Action (Operations)
<b>RC</b>	Response Complete
<b>RD</b>	Remedial Design
<b>RI</b>	Remedial Investigation
<b>RIP</b>	Remedy in Place
<b>ROD</b>	Record of Decision
<b>SI</b>	Site Inspection

---

## Acronyms & Abbreviations

<b>SMB</b>	Senior Management Board
<b>TAPP</b>	Technical Assistance for Public Participation
<b>TNT</b>	Trinitrotoluene
<b>TRC</b>	Technical Review Committee
<b>USAEC</b>	US Army Environmental Center
<b>USEPA</b>	US Environmental Protection Agency
<b>USCG</b>	US Coast Guard
<b>UTES</b>	Unit Training and Equipment Storage
<b>UXO</b>	Unexploded Ordnance

**Installation Locale:** The MMR is a 22,000 acre facility that serves as the major training site for Army National Guard Units, as well as other military and civilian organizations in the Northeast. Camp Edwards lies over a sole source aquifer in Barnstable County on Cape Cod in Massachusetts.

**Installation Mission:** Camp Edwards is an active training area for Army National Guard and Reserve units throughout New England.

**Lead Organization:**

Headquarters, NGB

**Lead Executing Agencies:** USAEC

**Regulatory Participation:**

**Federal:** USEPA Region I

**State:** Massachusetts Department of Environmental Protection (MassDEP)

**National Priorities List (NPL) Status:**

National Priority List Site (1989) (IRP)

Federal Facility Agreement (1991) (IRP)

**Projected Dates for Construction Completion:** 2017

**Projected Date for NPL Removal:** To be determined

**Installation Restoration Advisory Board (RAB)/Technical Review Committee**

**(TRC)/Technical Assistance for Public Participation (TAPP) Status:** There is an active RAB at MMR.

**Installation Program Summaries**

**IRP**

The Air Force Center for Environmental Excellence (AFCEE) is the DoD lead agent for the IRP.

**MMRP**

Primary Contaminants of Concern: UXO, Metals

Affected Media of Concern: Soil

Estimated Date for Remedy in Place (RIP)/Response Complete (RC): NA/2017

Funding to Date (up to FY05): \$0

Current Year Funding: \$510,000

Cost-to-Complete: \$18,092,000

---

## Cleanup Program Summary

**Installation Historic Activity:** Portions of Camp Edwards and the Massachusetts Military Reservation have been used for military purposes since 1911. Since 1935, the base has been used for military training and maneuvers, aircraft operations, maintenance, and support.

**1911** - The Massachusetts National Guard established a firing range on Upper Cape Cod

**1935** – The Governor established the Military Reserve Commission to purchase a campsite – the future Massachusetts Military Reservation.

**1938** – The Governor dedicates the campsite on Camp Cod as Camp Edwards and the Otis Field.

**1940** - The federal government entered into a lease with the Commonwealth of Massachusetts and built Camp Edwards/Massachusetts Military Reservation.

**1948** – The U.S. Air Force obtains control of Otis Field and renamed it as Otis Air Force Base.

**1953** – Congress authorized transfer from the Department of Army to the Department of Air Force for operation of the airfield; but the Army maintained control of the range and maneuver area (Camp Edwards).

**1970** - The USCG established Air Station Cape Cod

**1973** - The U.S. Army and Air Force began withdrawal from Camp Edwards and Otis Air Force Base.

**1975** - The Massachusetts National Guard assumed operational control of Camp Edwards.

**1978** - The U.S. Air Force established Air Force Station PAVE PAWS.

Description: The Massachusetts Military Reservation (MMR) is a military training facility located on state-owned land in the northwestern portion of Cape Cod in Barnstable County, Massachusetts. It includes parts of the towns of Bourne, Mashpee, Sandwich, and Falmouth. The MMR is leased from the Commonwealth of Massachusetts to the Army and Air Force and licensed back to the MANG. The license agreement was recently extended to 2051. The MMR covers nearly 21,000 acres - approximately 32 square miles. Camp Edwards' training ranges, approximately 14,000 acres with a 2,200-acre impact area, occupy the northern part of the MMR. The MMR is used by the National Guard, the US Army Reserve, the Coast Guard, and law enforcement units throughout New England. In 1992, the state designated this area as a water supply reserve to be used for water supply and wildlife habitat, as well as compatible military training.

The other main areas of the Massachusetts Military Reservation include:

- Camp Edwards cantonment area - 663 acres
- Otis Air National Guard Base - 3,439 acres
- US Coast Guard Air Station Cape Cod & US Coast Guard Transmitter Station - 1,503 acres
- US Department of Veterans Affairs Massachusetts National Cemetery - 755 acres
- Cape Cod Air Force Station - 87 acres
- Miscellaneous – County jail, Bourne water tower, schools, and utility easements – 332 acres

---

## Cleanup Program Summary

The Massachusetts Military Reservation, which has been designated as a water reserve, is located over the recharge area of the Sagamore Lens, the sole-source aquifer supplying drinking water for the upper part of Cape Cod.

**Current Activity:** The mission of Camp Edwards, MA continues to be military training. It consists of two major components to sustain training, a training area and a cantonment area. The training area is approximately 15,000 acres and provides adequate and realistic maneuver space, small arms ranges, and an impact area. Although all use of high explosives has ceased and small arms firing is restricted to plastic bullets, all current ranges are still designated as operational ranges. The cantonment area has a variety of facilities to support current and future training. The facilities consist of a Headquarters element for command and control, a Regional Training Institute, an Army Flight Facility, a Unit Equipment Storage Site, and a Training Area Support Center. Additionally, within the cantonment area are barracks, administrative and supply buildings, and dining facilities for unit support during training.

### **IRP**

- The AFCEE is the DoD lead agent for the IRP

### **MMRP**

- Prior Year Progress: Preliminary Assessment (PA) completed at all sites.
- Future Plan of Action: The installation plans to complete the SIs by 2007, Remedial Investigations/ Feasibility Studies (RI/FS) by 2012, and execute follow-on phases/actions as required in the individual site cleanup strategies.

# MTA CAMP EDWARDS

## Military Munitions Response Program

**Total AEDB-R MMRP Sites/AEDB-R sites with Response Complete:** 7/0

**AEDB-R Site Types:**

4 Unexploded Munitions/Ordnance

3 Small Arms Range

**Most Widespread Contaminants of Concern:** UXO, metals

**Media of Concern:** Soil

**Completed REM/IRA/RA:** None

**TOTAL MMRP Funding:**

Prior Years (up to FY05): \$0

Current Year (FY06): \$510,000

Future Requirements (FY07+): \$18,092,000

**Duration of MMRP:**

Year of MMRP Inception: 2003

Year of MMRP RIP/RC: NA/2017

Year of MMRP Completion Including LTM: 2047

---

## MMRP Contamination Assessment

### ***MMRP Contamination Assessment Overview:***

The Phase 3 Army Range Inventory was completed at Camp Edwards in December 2003. The inventory identified seven sites as eligible for MMRP (Mock Village, Old G Range, Old Grenade Range, Old K Range, Otis Target Butt, Small Arms Range, and Stables Area). The Phase 3 Inventory serves as the Preliminary Assessment (PA) under CERCLA.

### ***MMRP Cleanup Exit Strategy:***

The installation plans to complete all SIs by 2007 and execute follow-on phases/actions as required in the individual site cleanup strategies.

### 2003

- The Phase 3 Army Range Inventory, December.

# MTA CAMP EDWARDS

## Military Munitions Response Program Site Descriptions

# MMR-001-R-01 MOCK VILLAGE

## SITE DESCRIPTION

In the early 1940s, a mock village was constructed on the north side of Jefferson Road east of Barlow Road within the current US Coast Guard (USCG) Communications Station. The Mock Village is located near the northern end of the eastern installation boundary. The purpose of the village was to instruct troops in the methods of street reconnaissance; fighting, clearing homes, and villages; and in firing accurately and quickly at suddenly appearing targets. Ordnance utilized at the site included .30 caliber blank rounds, blocks of Trinitrotoluene (TNT), pyrotechnics (booby traps), and offensive hand grenades. It is believed the Mock Village was used only in the 1940s. Based on the 1941, 1947, 1949, and the undated Camp Edwards Master Plan maps, the size of the Mock Village is estimated at 15-acres.

Currently this area is an off-limits area operated by the USCG to maintain several communication towers. The Mock Village is in the northern portion of the USCG facility, which is mostly wooded. During the visual site inspection portion of the 1999 Archive Search Report (ASR), no remains of the Mock Village were evident, nor was evidence of ordnance and explosives (OE). Since 1981, there have been 5 discoveries of OE at the USCG Communications Station. One discovery was of an 81mm illumination mortar, while the other 4 items are unknown because they were simply reported as “duds.” It is not known if these discoveries are located within the former Mock Village.

## CLEANUP STRATEGY

An installation-wide SI which includes a Historical Records Review (HRR) will be conducted. Assume a RI/FS including the installation of groundwater monitoring wells will be required. A MEC Site Characterization and Removal Assessment will be completed followed by a MEC Removal Action and MEC Monitoring. Groundwater monitoring wells will be decommissioned at the end of long-term management.

## STATUS

**REGULATORY DRIVER:** CERCLA

**RAC SCORE:** 2 – Serious

**CONTAMINANTS OF CONCERN:**  
UXO

**MEDIA OF CONCERN:** Soil

Phases	Start	End
PA.....	200303 .....	200309
SI.....	200510 .....	200709
RI/FS .....	201110 .....	201209
RD .....	201510 .....	201609
RA(C) .....	201610 .....	201709
LTM .....	201710 .....	204709

**RC DATE:** 201709

# MMR-002-R-01

## OLD G RANGE (PAGE 1 OF 2)

### SITE DESCRIPTION

According to the 1999 ASR, the first known G Range was the known distance rifle range constructed between 1935 and 1941. It existed north of Dolan Road near the eastern installation boundary. The Old G Range is shown on Plate 2 of the 1999 ASR (Range Layout Circa 1941). This original construction consisted of a 20-target range with the butt wall at 200 yards. The butt wall included a large berm with raising and lowering mechanisms to place a target at the top of the butt wall. The firing line and butt wall ran east-west, and the line of fire was to the north of Dolan Road. The direction of fire was northerly and there was no impact berm for rounds. Rounds would have impacted into the butt wall only if the round significantly missed the target. In 1941, major improvements and expansion of the existing G Range were completed. The existing butt wall at 200 yards was expanded to

accommodate 150 targets, and an additional butt wall at 300 yards accommodating 70 targets was constructed. The firing line was continuous and level for about 2,400 feet, nearly the entire length of Dolan Road. Approximately 1,700 feet of tunnel was also constructed to provide safe access from the firing line to the target butts. A portion of the Old G Range is within the operational footprint. Since the firing line ran east-west for approximately 2,400 feet and firing was toward the north, it is assumed that the western most portion of the target line is within the operational footprint. Use of the known distance rifle range continued into the 1950s. Expected ordnance use for the entire time period is limited to .30 caliber ball ammunition. During the early 1940s, .30 caliber rifles were fired on the G Range according to their training diaries. It should be noted that during this time, the main offices for Range Control were located on the south side of Dolan Road just south of the G Range. This former range is grouped with other small arms ranges in the 1999 ASR (Area B) because of similar use. Based on the 1999 ASR delineation of this former range and its appearance on the 1941, 1947, 1949, and undated Camp Edwards Master Plan maps, the Old G Range is estimated at 187-acres. On the historic maps, this range is labeled interchangeably as G, Ga/Gb, Known Distance Rifle Range, and Rifle Range.

This area was used as a BOMARC (Boeing Michigan Aeronautical Research Center) missile facility from 1959 until it was deactivated in April 1972. In 1975, the Unit Training and Equipment Storage (UTES) facility was established at the former location of the BOMARC missile facility. The UTES still operates today at the same location. Military vehicles, artillery pieces, and other heavy equipment are stored and serviced there.

### STATUS

**REGULATORY DRIVER:** CERCLA

**RAC SCORE:** 5 - Negligible

**CONTAMINANTS OF CONCERN:**  
Metals

**MEDIA OF CONCERN:** Soil

Phases	Start	End
PA.....	200303 .....	200309
RI/FS .....	201110 .....	201209
RD .....	201510 .....	201609
RA(C).....	201610 .....	201709

**RC DATE:** 201709

## MMR-002-R-01

### OLD G RANGE (PAGE 2 OF 2)

From the 1950s to the early 1970s, no range on MMR carried the designation of G Range. In the early 1970s, a new G Range was established off Greenway Road. In the late 1980s, G Range was relocated to its present location on Pocasset-Forestdale Road east of Frank Perkins Road. These locations all correspond to operational range property.

#### CLEANUP STRATEGY

An installation-wide SI which includes a HRR will be conducted and will include Old G Range. Assume a RI/FS including the installation of groundwater monitoring wells will be required followed by excavation, off-site waste transportation, and disposal. Groundwater monitoring wells will be decommissioned at the end of the removal action.

# MMR-003-R-01 OLD GRENADE COURTS

## SITE DESCRIPTION

In 1941, dummy grenade courts were constructed in a location currently north of the intersection of Kittredge Road and General's Boulevard. The site is also near the southern installation boundary. The purpose of the courts was to provide practice in throwing hand grenades from various distances at trenches; through cellar, first, second, and third story windows; at circular ground targets; and at unseen trenches. A total of 12 layouts with the above features were constructed. Ordnance use at the courts would have been limited to practice or dummy hand grenades.

A live grenade court was built in 1941 near the same location as the dummy grenade court. Soldiers threw live grenades from a trench towards a designated impact area. Accuracy of throw and effect of the grenade was viewed from two parapets located 30 feet behind the throwing trench. Ordnance used at the live grenade court was limited to High Explosives (HE) fragmentation grenades. In the early 1940s, training was conducted on the grenade court and utilized fragmentation grenades.

The 1999 ASR classifies the dummy and live grenade courts together as Area 0 consisting of 39-acres. The practice and live grenade courts were used in the 1940s and 1950s. Both courts existed next to each other near the intersection of Kittredge Road and General's Boulevard. A trench network and several mounds were discovered in this location. Currently the area is idle land that is thickly vegetated except for areas cleared for power lines. Expected ordnance use in Area 0 is limited to practice, dummy, and fragmentation hand grenades. According to the 1999 ASR, there have been no reported incidents involving OE at the Old Grenade Courts.

## CLEANUP STRATEGY

An installation-wide SI which includes a HRR will be conducted. Assume a RI/FS including the installation of groundwater monitoring wells will be required. A MEC Site Characterization and Removal Assessment will be completed followed by a MEC Removal Action and MEC Monitoring. Groundwater monitoring wells will be decommissioned at the end of long-term management.

## STATUS

**REGULATORY DRIVER:** CERCLA

**RAC SCORE:** 2 - Serious

**CONTAMINANTS OF CONCERN:**  
UXO

**MEDIA OF CONCERN:** Soil

Phases	Start	End
PA.....	200303 .....	200309
SI.....	200510 .....	200709
RI/FS .....	201110 .....	201209
RD .....	201510 .....	201609
RA(C) .....	201610 .....	201709
LTM .....	201710 .....	204709

**RC DATE:** 201709

SITE DESCRIPTION

The original K Range was constructed as a moving target rifle range in 1941 off Greenway Road just north of Wood Road, in the area now known as the USCG Communications Station. The Old K Range is located near the northern end of the eastern installation boundary. The range had two firing lines, a 200-yard firing line 915 feet long and a 300-yard firing line 1,360 feet long. The firing lines ran parallel to Greenway Road, with the 300-yard firing line located just west of Greenway Road. Both lines fired at a target butt made of railroad ties and earth. The direction of fire was west, toward the impact area. Soldiers carried silhouette targets on sticks behind the target butt to simulate moving targets. Expected ordnance use on the Old K Range is limited to .30 caliber ball rounds. Direction of rifle fire was to the northwest. No impact berm was present, but poorly fired rounds could have impacted on the target butt wall. The Old K Range was used as a moving target rifle range until the 1950s. The 1949 Range Layout map (1999 ASR Plate 3) lists the Old K Range as a 2.36" Rocket Range. However, no additional data was found regarding use of the Old K Range as a rocket range.

Based on the 1941, 1947, 1949, and the undated Camp Edwards Master Plan maps, the Old K Range is estimated at 119-acres. The remaining portion of the Old K Range is operational range property. The location and use of K Range has changed four times since the 1960s. Between 1986 and 1989, K Range was moved to its present location on Pocasset-Forestdale Road.

Currently the Old K Range is an off-limits area operated by the USCG to maintain several communication towers. The Old K Range is in the central portion of the USCG facility, which is clear and well maintained. The only remnants of range activity discovered were several earthworks (berms and mounds) located just north of Wood Road. The team discovered no evidence of OE during the visual site inspection portion of the 1999 ASR. Since 1981, there have been five discoveries of OE at the USCG Communications Station. One discovery was of an 81mm illumination mortar, while the other four items are unknown because they were simply reported as "duds." It is not known if these discoveries are located within the Old K Range.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: 3 - Moderate

CONTAMINANTS OF CONCERN:  
UXO, Metals

MEDIA OF CONCERN: Soil

Phases	Start	End
PA .....	200303.....	200309
RI/FS .....	201110.....	201209
RD .....	201510.....	201609
RA(C) .....	201610.....	201709
LTM.....	201710.....	204709

RC DATE: 201709

**CLEANUP STRATEGY**

An installation-wide SI which includes a HRR will be conducted and will include Old K Range. Assume a RI/FS including the installation of groundwater monitoring wells will be required. A MEC Site Characterization and Removal Assessment will be completed followed by excavation, off-site waste transportation, and disposal. A MEC Removal Action and MEC Monitoring will also be conducted. Groundwater monitoring wells will be decommissioned at the end of long-term management.

# MMR-005-R-01

## OTIS TARGET BUTT

### SITE DESCRIPTION

A target butt is shown on a map included in the "Completion Report on Construction of Various Additional Housing Facilities, Extension of Landing Strips, and an Air Support Command Base" dated July 1, 1943. The target butt is shown on the southern edge of the dispersal taxiway which surrounded the runways. From the scale of this map, it is estimated that the target butt was at the end of a 600-foot taxiway spur and approximately 200 feet wide. From the map, it is also assumed that the direction of fire was toward the southeast. No additional details about the layout of the range were available. A memorandum describing a visit to Otis Air Force Base dated April 21, 1950 lists the ranges and butts at Otis Air Force Base. The memo states that a "shooting-in butt for test firing aircraft which is in the process of extension to total length of 900 ft." From this description it is estimated that the Otis Target Butt is approximately 1 acre. The Otis Target Butt is visible on the 1947 aerial photo and the 1949 map; however, it is not labeled as a target butt on either map. Based on the maps, report, and memorandum, it is estimated that this range was used from 1942 to 1955. It is also assumed that only small arms were used at this range based on the type of aircraft used during this period. The area is currently part of the MAANG Otis Airfield and surrounded by the current runway and support buildings. The site is located in the southeastern corner of the installation.

### STATUS

**REGULATORY DRIVER:** CERCLA

**RAC SCORE:** 5 - Negligible

**CONTAMINANTS OF CONCERN:**  
Metals

**MEDIA OF CONCERN:** Soil

Phases	Start	End
PA.....	200303 .....	200309
SI .....	200510 .....	200709
RI/FS .....	201110 .....	201209
RD .....	201510 .....	201609
RA(C) .....	201610 .....	201709

**RC DATE:** 201709

### CLEANUP STRATEGY

An installation-wide SI which includes a HRR will be conducted and will include the Otis Target Butt. Assume a RI/FS including the installation of groundwater monitoring wells will be required followed by excavation, off-site waste transportation, and disposal. Groundwater monitoring wells will be decommissioned at the end of the removal action.

# MMR-006-R-01

## SMALL ARMS RANGE

### SITE DESCRIPTION

During the 1940s, two skeet ranges existed at MMR. One was located in the northeast corner of the current landfill, at the southwest corner of the intersection of Herbert and Turpentine Roads.

The other skeet range was located at the northeast corner of the intersection of Herbert and Frank Perkins Roads. Only the range at the intersection of Herbert and Turpentine Roads is included because the other range is located on operational range property. This former range is located in the south-central portion of the installation, at the northern edge of the cantonment area. No information regarding the layout of ranges is currently available. However, given the typical nature of skeet ranges, it is reasonable to assume that 10- or 12-gauge shotgun shells were utilized at the ranges. This former range appears on the undated Camp

Edwards Master Plan as a skeet range. According to the training diaries, one of the skeet ranges was used for firing shotguns, but it is not known which one. In an interview with a World War II veteran from Camp Edwards, he states that occasional rifle firing was conducted at a rifle range off of Turpentine Road near the cantonment area. It is unknown if the veteran is referring to this range or the Old G Range. This former range is grouped with other small arms ranges in the 1999 ASR (Area B) because of similar use. Based on the 1999 ASR delineation of this former range, it is estimated at 22-acres. The period of use is estimated from 1941 to 1955 based on the usage of similar ranges at Camp Edwards during this time period. The 1999 ASR summary of OE discoveries from 1980 to 1998 includes 7.62mm blank rounds (698 rounds) found December 23, 1993 at the landfill. It is not clear if this discovery is associated with the landfill operations or the former range.

### STATUS

**REGULATORY DRIVER:** CERCLA

**RAC SCORE:** 5 - Negligible

**CONTAMINANTS OF CONCERN:**  
Metals

**MEDIA OF CONCERN:** Soil

<u>Phases</u>	<u>Start</u>	<u>End</u>
PA.....	200303 .....	200309
RI/FS .....	201110 .....	201209
RD .....	201510 .....	201609
RA(C) .....	201610 .....	201709

**RC DATE:** 201709

### CLEANUP STRATEGY

An installation-wide SI which includes a HRR will be conducted and will include Small Arms Range. Assume a RI/FS including the installation of groundwater monitoring wells will be required followed by excavation, off-site waste transportation, and disposal. Groundwater monitoring wells will be decommissioned at the end of the removal action.

# MMR-007-R-01 STABLES AREA

## SITE DESCRIPTION

The Stables Area was used as holding pens for horses and other livestock during the 1950s and 1960s. The area consists of approximately 19 acres in the southern portion of the installation east of the golf course. Currently, the Stables Area is unused and undeveloped. No records were found for any EOD emergency calls made to this site, and no EOD reports were filed for the Stables Area.

In 2002, USAEC managed a UXO project involving the creation of standardized UXO calibration sites. Camp Edwards was selected as one of the installations for the program to create the site. The project team would coordinate with the installation and range control to identify an area that did not have a past history of munitions related use to set-up a controlled calibration/survey test area, so the Stables Area was selected as the test area at Camp Edwards. The team would survey and clear the area of magnetic anomalies prior to burying the controlled inert ordnance items. During the site preparation for the area, the team uncovered several ordnance items including 2.36" rockets along with ferrous debris (i.e., horseshoes, hot rocks, etc.). Due to the large number of magnetic hits in the area, the team decided not to put the calibration site at that location. The potential for additional ordnance remaining at the site was not evaluated/characterized. Based on discussions with the Cultural Resource Manager for Camp Edwards, the ordnance items found at the site may have been carried in from other areas. There were no records indicating that the site was used for ground training. The size and location of the Stables Area was based on interviews with former employees and local residents conducted by the Cultural Resource Manager for Camp Edwards.

## CLEANUP STRATEGY

An installation-wide SI which includes a HRR will be conducted and will include Stables Area. A MEC Site Characterization and Removal Assessment will be completed followed by a MEC Removal Action and MEC Monitoring.

## STATUS

**REGULATORY DRIVER:** CERCLA

**RAC SCORE:** 3 - Moderate

**CONTAMINANTS OF CONCERN:**  
UXO

**MEDIA OF CONCERN:** Soil

Phases	Start	End
PA.....	200303 .....	200309
RI/FS .....	201110 .....	201209
RD .....	201510 .....	201609
RA(C) .....	201610 .....	201709
LTM .....	201710 .....	204709

**RC DATE:** 201709

**Initiation of MMRP:** 2003

### **Past Phase Completion Milestones**

**2003**

Completion of PA

***Projected ROD/DD Approval Date:*** 2012

***Projected Construction Completion:*** 2017

***Schedule for Five Year Reviews:*** *Unknown*

***Estimated Completion Date of MMRP including LTM:*** 2047

## MTA CAMP EDWARDS

(Based on current funding constraints)

AEDB-R#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
MMR-001-R-01	SI									
	RI/FS									
	RD									201609
	RA(C)									201709
	LTM									204709
MMR-002-R-01	RI/FS									
	RD									201609
	RA(C)									201709
MMR-003-R-01	SI									
	RI/FS									
	RD									201609
	RA(C)									201709
	LTM									204709
MMR-004-R-01	RI/FS									
	RD									201609
	RA(C)									201709
	LTM									204709
MMR-005-R-01	SI									
	RI/FS									
	RD									201609
	RA(C)									201709
MMR-006-R-01	RI/FS									
	RD									201609
	RA(C)									201709
MMR-007-R-01	RI/FS									
	RD									201609
	RA(C)									201709
	LTM									204709

### *Prior Years Funds*

**Total Funding up to FY04: \$0K**

**Total Prior Year Funds: \$0K**

### *Current Year Requirements*

Year	Site Information	Requirements	FY Total
FY06	MMR-001-R-01	\$295K	
	MMR-003-R-01	\$118K	
	MMR-005-R-01	\$ 97K	<b>\$510K</b>

**Total Funding FY06: \$510K**

**Total Future Requirements: \$18,092K**

**Total MMR Program Cost (from inception to completion of the MMRP): \$18,602K**

---

## Community Involvement

The MAARNG Public Affairs Office coordinates all public information for its military units. To facilitate the variety of environmental issues that occur at Camp Edwards, the MAARNG created the Environmental and Readiness Center (E&RC). The E&RC Community Outreach Program conducts community involvement and public affairs activities related to Camp Edwards' environmental, training, and site improvement activities. The E&RC Community Outreach Program is designed to keep citizens informed and involved. Proactive community outreach supports the success of Camp Edwards' programs and initiatives by helping to avoid delay and problems related to public concerns caused by lack of information about military activities at Camp Edwards.

Press releases, fact sheets, briefings to advisory and other stakeholder groups, and public meetings are major components of the E&RC efforts for Camp Edwards. Camp Edwards actively participates in several different community advisory boards and related public meetings. They include the quarterly meeting of the Environmental Management Commission (EMC) and its two advisory councils as mentioned under *Current Activities*, the MMR Senior Management Board (SMB), and the MMR Military Civilian Community Council (MC3).

The Senior Management Board (SMB) provides input on all environmental programs at the MMR. The coordination of the SMB is the responsibility of the E&RC. The SMB consists of selectmen from the surrounding communities, tribal representatives, military representatives, and regulators. Because of increasing confidence in the environmental programs at MMR, the SMB recently changed from monthly to bimonthly meetings.

The MMR Military Civilian Community Council (MC3) was created by the MANG as a forum to discuss encroachment and development issues concerning the MMR and the surrounding communities. The MC3 has representation from all MMR military commands, the four towns bordering the MMR, and various community leaders and groups. The MC3 meets quarterly.

Other community involvement venues that Camp Edwards is engaged with the local community to manage encroachment issues and discuss future development include the Army Compatible Use Buffer program and the Joint Land Use Study. These two programs are DA sponsored and have boards meeting regularly comprised of both military and community member representatives.

Currently there exist forums and venues to present relevant information regarding the MMRP to the community. In some respects the activities of the Phase III range inventory were presented to the community when they occurred. In the future when the field work begins, the E&RC will coordinate with Camp Edwards to inform the community about these activities.